

IN THE CLAIMS:

Please cancel claims 6 and 7 without prejudice or disclaimer.

Please amend claims 1, 8, 13, 16, 20, 27 and 28 as follows:

1. (Currently Amended) A camera comprising:

an image-taking optical system which includes a focusing lens and
a ~~[[stop]]~~ zooming lens;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is
stopped at a target position by performing deceleration control in accordance with a
predetermined deceleration control pattern; and

a state detector which detects ~~one of a focal length and a set value~~
~~of the stop~~ of the image-taking optical system,

wherein the controller changes the deceleration control pattern in
accordance with ~~one of the focal length and the set value of the stop~~ detected by the state
detector; and

the controller sets the deceleration control pattern in which, when the focal length of the
image-taking optical system is on a wide-angle side closer to a wide-angle end than a
predetermined focal length, the motor is decelerated for stopping at a deceleration rate
larger than a deceleration rate when the focal length is on a telephoto side, after a
remaining driving amount becomes equal to or less than a predetermined amount.

2.- 7 (Cancelled)

8. (Currently Amended) A camera comprising:

an image-taking optical system which includes a focusing lens and a ~~[[stop]]~~ zooming lens;

a motor which drives the focusing lens;

a position detector which detects a position of the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control from the time when a difference between the target position and the position detected by the position detector is equal to or smaller than a predetermined amount; and

a state detector which detects ~~one of a focal length, and a set value of the stop~~ of the image-taking optical system,

wherein the controller changes the predetermined amount in accordance with ~~one of the focal length and the set value of the stop~~ detected by the state detector.

9. (Cancelled)

10. (Previously Presented) The camera according to claim 8, wherein the controller sets the predetermined amount to a smaller amount when a focal length of the image-taking optical system is on a wide-angle side closer to a wide-angle end than a predetermined focal length as compared with an amount set when the focal length is on a telephoto side.

11.-12 (Cancelled)

13. (Currently Amended) A lens apparatus comprising:

an image-taking optical system which includes a focusing lens and a ~~[[stop]]~~ zooming lens;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a predetermined deceleration control pattern; and

a state detector which detects ~~one of a focal length and a set value of the stop~~ of the image-taking optical system,

wherein the controller changes the deceleration control pattern in accordance with ~~one of the focal length and the set value of the stop~~ detected by the state detector.

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) The lens apparatus according to claim 13, wherein the controller sets the deceleration control pattern in which, when the focal length of the image-taking optical system is on a wide-angle side closer to a wide-angle end than a predetermined focal length, the motor is decelerated for stopping at a deceleration rate larger than a deceleration rate when the focal length is on a telephoto side, after a remaining driving amount becomes equal to or less than a predetermined amount.

17.-19. (Cancelled)

20. (Currently Amended) A lens apparatus comprising:

an image-taking optical system which includes a focusing lens and
a ~~[[stop]]~~ zooming lens;

a motor which drives the focusing lens;

a position detector which detects a position of the focusing lens;

a controller which controls the motor such that the focusing lens is
stopped at a target position by performing deceleration control from the time when a
difference between the target position and the position detected by the position detector is
equal to or smaller than a predetermined amount; and

a state detector which detects ~~one of a focal length and a set value~~
~~of the stop of the image-taking optical system,~~

wherein the controller changes the predetermined amount in
accordance with ~~one of the focal length and the set value of the stop~~ detected by the state
detector.

21. (Cancelled)

22. (Previously Presented) The lens apparatus according to claim 20,
wherein the controller sets the predetermined amount to a smaller amount when a focal
length of the image-taking optical system is on a wide-angle side closer to a wide-angle
end than a predetermined focal length as compared with an amount set when the focal
length is on a telephoto side.

23.-24. (Cancelled)

25. (Original) A camera system comprising:

the lens apparatus according to claim 13; and

a camera on which the lens apparatus is mountable.

26. (Original) A camera system comprising:

the lens apparatus according to claim 20; and

a camera on which the lens apparatus is mountable.

27. (Currently Amended) A camera comprising:

an image-taking optical system which includes a focusing lens and

a zooming lens;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a deceleration pattern selected from a plurality of deceleration patterns which includes different deceleration rate; and

a state detector which detects a focal length of the image-taking optical system,

wherein the controller select the deceleration pattern based on the focal length detected by the state detector.

28. (Currently amended) A camera comprising:

an image-taking optical system which includes a focusing lens and

~~a stop~~ diaphragm;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a deceleration pattern selected from a plurality of deceleration patterns which includes different deceleration rate; and

a state detector which detects a state of ~~the stop of the diaphragm~~ of the image-taking optical system,

wherein the controller select the deceleration pattern based on the state of the ~~[[stop]]~~ diaphragm detected by the state detector.

Please add new claims 29-45, as follows:

29. (New) A camera comprising:

an image-taking optional system which includes a focusing lens and an aperture diaphragm;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a predetermined deceleration control pattern; and

a state detector which detects an aperture value of the image-taking optical system,

wherein the controller changes the deceleration control pattern in accordance with the aperture value detected by the state detector; and

the controller sets the deceleration control pattern in which, when the aperture value of the image-taking optical system is on a narrowed said relative to a

predetermined aperture value, the motor is decelerated for stopping at a deceleration rate larger than a deceleration rate when the aperture value is on an opened side, after a remaining driving amount becomes equal to or less than a predetermined amount.

30. (New) A camera comprising:

an image-taking optical system which includes a focusing lens and an aperture diaphragm;

a motor which drives the focusing lens;

a position detector which detects a position of the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control from the time when a difference between the target position and the position detected by the position detector is equal to or smaller than a predetermined amount; and

a state detector which detects an aperture value of the image-taking optical system,

wherein the controller changes the predetermined amount in accordance with the aperture value detected by the state detector, when the aperture value of the image-taking optical system is on a narrowed side relative to a predetermined aperture value.

31. (New) The camera according to claim 30, wherein the controller

sets the predetermined amount to a smaller amount when the aperture value is on a narrowed side relative to a predetermined aperture value as compared with an amount set when the aperture value is on an opened side.

32. (New) A lens apparatus comprising:

an image-taking optical system which include a focusing lens and an aperture diaphragm;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a predetermined deceleration control pattern; and

a state detector which detects an aperture value of the image-taking optical system,

wherein the controller changes the deceleration control pattern in accordance with the aperture value detected by the state detector.

33. (New) The lens apparatus according to claim 32, wherein the controller sets the deceleration control pattern in which, when the aperture value is on a narrowed side relative to a predetermined aperture value, the motor is decelerated for stopping at a deceleration rate smaller than a deceleration rate when aperture value is on an opened side, until a remaining driving amount becomes equal to or less than a predetermined amount.

34. (New) The lens apparatus according to claim 32, wherein the controller sets the deceleration control pattern in which, when the aperture value is on a narrowed side relative to a predetermined aperture value, the motor is decelerated for stopping at a deceleration rate larger than a deceleration rate when the aperture value is on an opened side, after a remaining driving amount becomes equal to or less than a predetermined amount.

35. (New) A camera comprising:

an image-taking optical system which includes a focusing lens and a zooming lens;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a predetermined deceleration control pattern; and

a state detector which detects a focal length of the image-taking optical system,

wherein the controller changes the deceleration control pattern in accordance with the focal length detected by the state detector.

36. (New) A camera comprising:

an image-taking optical system which includes a focusing lens and an aperture diaphragm;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a predetermined deceleration control pattern; and

a state detector which detects an aperture value of the image-taking optical system,

wherein the controller changes the deceleration control pattern in accordance with the aperture value detected by the state detector.

37. (New) The camera according to claim 35, wherein the controller sets the deceleration control pattern in which, when the focal length of the image-taking

optical system is on a wide-angle side closer to a wide-angle end than a predetermined focal length, the motor is decelerated for stopping at a deceleration rate larger than a deceleration rate when the focal length is on a telephoto side, after a remaining driving amount becomes equal to or less than a predetermined amount.

38. (New) The camera according to claim 36, wherein the controller sets the deceleration control pattern in which, when the aperture value is on a narrowed side relative to a predetermined aperture value, the motor is decelerated for stopping at a deceleration rate smaller than a deceleration rate when the aperture value is on an opened side, until a remaining driving amount becomes equal to or a predetermined amount.

39. (New) The camera according to claim 36, wherein the controller sets the deceleration control pattern in which, when the aperture value is on a narrowed side relative to a predetermined aperture value, the motor is decelerated for stopping at a deceleration rate larger than a deceleration rate when the aperture value is on an opened side, after a remaining driving amount becomes equal to or less than a predetermined amount.

40. (New) A lens apparatus comprising:
an image-taking optical system which includes a focusing lens and
an aperture diaphragm;
a motor which drives the focusing lens;
a position detector which detects a position of the focusing lens;
a controller which controls the motor such that the focusing lens is
stopped at a target position by performing deceleration control from the time when a

difference between the target position and the position detected by the position detector is equal to or smaller than a predetermined amount; and

a state detector which detects an aperture value of the image-taking optical system,

wherein the controller changes the predetermined amount in accordance with the aperture value detected by the state detector, when the aperture value of the image-taking optical system is on a narrowed side relative to a predetermined aperture value.

41. (New) The lens apparatus according to claim 40, wherein the controller sets the predetermined amount to a smaller amount when the aperture value is on a narrowed side relative to a predetermined aperture value as compared with an amount set when the aperture value is on an opened side.

42. (New) A camera system comprising:
the lens apparatus according to claim 32; and
a camera on which the lens apparatus is mountable.

43. (New) A camera system comprising:
the lens apparatus according to claim 40; and
a camera on which the lens apparatus is mountable.

44. (New) A lens apparatus comprising:
an image-taking optical system which includes a focusing lens and
a zooming lens;
a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a deceleration pattern selected from a plurality of deceleration patterns which includes different deceleration rate; and

a state detector which detects a focal length of the image-taking optical system,

wherein the controller selects the deceleration pattern based on the focal length detected by the state detector.

45. (New) A lens apparatus comprising:

an image-taking optical system which includes a focusing lens a diaphragm;

a motor which drives the focusing lens;

a controller which controls the motor such that the focusing lens is stopped at a target position by performing deceleration control in accordance with a deceleration pattern selected from a plurality of deceleration patterns which includes different deceleration rate; and

a state detector which detects a state of the diaphragm of the image-taking optical system,

wherein the controller selects the deceleration pattern based on the state of the diaphragm detected by the state detector.